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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,516	10/15/2003	Peter A. R. Bennett	HOR-16REISSUE (EKC 90372)	6722
1333 7590 02/27/2007 PATENT LEGAL STAFF EASTMAN KODAK COMPANY 343 STATE STREET ROCHESTER, NY 14650-2201			EXAMINER LEE, SIN J	
			ART UNIT 1752	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	DELIVERY MODE
3 MONTHS			02/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/686,516	Applicant(s) BENNETT ET AL.	
	Examiner Sin J. Lee	Art Unit 1752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/22/06, 9/8/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51,53,54,56-61 and 63-65 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-51,53,54,56-61 and 63-65 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/194,822.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Oath/Declaration

1. The supplemental reissue oath/declaration filed on March 23, 2006 is defective because it is missing inventors' signatures. The oath or declaration does not comply with all the requirements of 37 CF 1.63 and 37 CFR 1.175: Applicants submitted a second preliminary amendment on March 25, 2005, which is not addressed in the original oath/declaration. See 37 CFR 1.175 (b)(1) and MPEP § 1414.
2. Claims 1-50, 51, 53, 54, 56-61, 63-65 are rejected as being based upon a defective reissue oath or declaration under 35 U.S.C. 251 as set forth above. See 37 CFR 1.175.

The nature of the defect(s) in the oath or declaration is set forth in the discussion above in this Office action.

3. *The amendment filed September 8, 2006 proposes amendments to the Specification that do not comply with 37 CFR 1.173(b), which sets forth the manner of making amendments in reissue applications. A supplemental paper correctly amending the reissue application is required.*

Any changes relative to the patent being reissued which are made to the specification, including the claims, upon filing, or by an amendment paper in the reissue application, must include the following markings: (1) The matter to be omitted by reissue must be enclosed in brackets; and (2) The matter to be added by reissue must be

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underlined, except for amendments submitted on compact discs (§§ 1.96 and 1.821(c)).

Matter added by reissue on compact discs must be preceded with "<U>" and end with "</U>" to properly identify the material being added.

4. Upon reconsideration, previous recapture rejection on claims 37-51, 53, 54, 56-61 and 63-65 under 35 U.S.C. 251 is hereby withdrawn.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-51, 53, 54, 56-61 and 63-65 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicants recite "laser means" in claims 1 and 25 and recite "an infrared laser" in claims 37 and 59. Since the original patent is drawn to a method of preparing a printing form using a ***digitally controlled*** laser output, present limitations "laser means" and "an infrared laser" (without the phrase "digitally controlled") constitute new matter.

Applicants point to the specification (col.3, lines 28-35) of the original patent, which states that "adjacent to the spinning disc a translating table held the source of *the laser beam* so that *the laser beam* impinged normal to the coated substrate, . . ." and argue that Example 1-13 do not describe only digitally controlling the laser. However, it

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is the Examiner's position that the term "***the*** laser beam" was referring to *the digitally controlled laser* which was mentioned several times throughout the specification before col.3, lines 28-35.

Claim Rejections - 35 USC § 251

7. Claims 1-51, 53, 54, 56-61 and 63-65 are rejected under 35 U.S.C. 251 as being based upon new matter added to the patent for which reissue is sought. The added material which is not supported by the prior patent is as follows:

Applicants recite "laser means" in claims 1 and 25 and recite "an infrared laser" in claims 37 and 59. Since the original patent is drawn to a method of preparing a printing form using a ***digitally controlled*** laser output, present limitations "laser means" and "an infrared laser" (without the phrase "digitally controlled") constitute new matter (see Paragraph 4 above).

8. It is to be noted that present claim 6 was interpreted by the Examiner to mean that every steps of claim 1 (or 3) was carried out in situ in a printing press.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-4, 7-12, 14-16, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaoka et al (5,756,258) in view of Sulzberg (4,173,554), Sorresso (3,919,754) and Bi et al (5,599,650).

Yamaoka teaches a photopolymerizable composition having a high sensitivity to *visible and near infrared light* at a wavelength of *600 nm or more* (col.1, lines 17-21). The photopolymerizable composition comprises (see col.4, lines 50-55), an addition-polymerizable compound, which has at least one ethylenically unsaturated double bond, a radical generating agent and squarylium compound (*present infrared-absorbing dye*). According to col.7, lines 17-25, Yamaoka's addition-polymerizable compound can either be a monomer (such as esters of unsaturated carboxylic acid and an aliphatic polyhydroxy compound as listed in col.7, lines 38-54) or a polymer having an ethylenically unsaturated double bond on the main or side chain (such as polymers obtained by a polymeric reaction of a polyvinyl alcohol, an epoxy resin, a phenoxy resin or the like with an unsaturated carboxylic acid – see col.8, lines 31-37) so that upon irradiation of an active ray to the photopolymerizable composition, the ethylenical compound cures due to addition-polymerization by the action of the radical-producing agent and the photodecomposition product of the squarylium compound. Thus, Yamaoka teaches present radiation sensitive resin. Yamaoka also teaches (col.7, lines 5-15, col.12, lines 66-67, col.13, line 1) that his composition can also contain a binder polymer such as poly(meth)acrylic esters as well as a colorant (a dyeing pigment). Yamaoka states (col.14, lines 18-20, lines 34-40) that his photopolymerizable composition can be used for making *printing plates* and that his composition is coated onto a base such as an aluminum sheet which surface is treated by graining and anodic oxidation processing (thus, Yamaoka teaches *present lithographic support having a hydrophilic surface*). The coated layer is then subjected to irradiation of light, and the

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irradiation source includes *visible and near infrared lasers* (col.14, lines 28-33 and lines 45-47). Then the unexposed portions of the photosensitive sample are removed with a developer (such as *aqueous solutions* of an organic alkali chemicals) to provide a printing plate (col.14, lines 32-33, lines 48-49, lines 54-55).

Therefore, Yamaoka teaches present invention of claim 1 (it is the Examiner's position that Yamaoka's photopolymerizable composition containing *colorant* compound teaches present radiation sensitive ink) except for the use of present dampening rollers and present phthalocyanine pigment and present in-situ development step done on a printing press. Yamaoka teaches (col.7, lines 5-15) that his colorant comprises an organic or inorganic dyeing pigment. Phthalocyanine pigment is a conventionally used organic pigment, as evidenced by Sulzberg, col.2, lines 39-43. Since Yamaoka does not give specific names for his organic or inorganic dyeing pigment, it would have been obvious to one of ordinary skill in the art to use conventionally used organic pigment such as phthalocyanine pigment (which is an infrared-absorbing pigment as well) in Yamaoka as a dyeing pigment with a reasonable expectation of obtaining a photopolymerizable composition having a high sensitivity to visible and near infrared light. Therefore, Yamaoka in view of Sulzberg would render obvious present phthalocyanine pigment. Also, even though Yamaoka does not explicitly state that his development step is done by using dampening rollers, dampening rollers are widely used in the art of printing trades where they are employed to carry water or other dampening solution to the printing plates, as evidenced by Sorresso, col.1, lines 13-16. It is the Examiner's position that one of ordinary skill in the art would have found it

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obvious to apply the developer (such as *aqueous solutions* of an organic alkali chemicals) in Yamaoka by using dampening rollers, which are widely used in the art of printing trades. Therefore, Yamaoka in view of Sorresso would render obvious the use of present dampening rollers. Although Yamaoka does not explicitly state that his development step is done on-press, such on-press development is well known in the art for its ability to develop an image without resorting to wet development steps or like intermediary processing steps, as evidenced by Bi et al, col.6, lines 43-62. Therefore, it would have been obvious to one of ordinary skill in the art to carry out an on-press development in Yamaoka in removing the unexposed portions of the photosensitive sample in order to develop the image without resorting to wet development steps and other intermediary processing steps (i.e., for convenience and for saving time).

Therefore, Yamaoka in view of Sulzberg, Sorresso and Bi would render obvious present inventions of claims 1-4, 7-12, 14-16, and 24.

11. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaoka et al (5,756,258) in view of Sulzberg (4,173,554), Sorresso (3,919,754) and Bi et al (5,599,650) as applied to claim 1 above, and further in view of Reichel (5,492,059).

Yamaoka in view of Sulzberg, Sorresso and Bi is discussed above in Paragraph 9. Yamaoka does not teach present sleeve or cylinder as his support material. However, as evidenced by Reichel (col.1, lines 15-43), sleeve-shaped printing forms are known in the art to be advantageous as they can easily be mounted onto a form cylinder. It is the Examiner's position that it would have been obvious to one of ordinary skill in the art to provide Yamaoka's aluminum base material in a sleeve shape so that it

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can be readily mounted on the form cylinder. Therefore, Yamaoka in view of Sulzberg and Sorresso and further in view of Reichel would render obvious present invention of claim 5.

12. Claims 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaoka et al (5,756,258) in view of Sulzberg (4,173,554), Sorresso (3,919,754) and Bi et al (5,599,650) as applied to claim 1 above, and further in view of Mattor (3,847,614).

Yamaoka in view of Sulzberg, Sorresso and Bi is discussed above in Paragraph 9. Yamaoka does not state that his photosensitive composition is coated to the base at a predetermined thickness. However, as evidenced by Mattor, col.1, lines 37-41, it is known in the art that in general, the thicker the layer of a photosensitive material, the greater the run length of a printing plate. Based on Mattor's teaching, it would have been obvious to one of ordinary skill in the art to apply a certain thickness (which is predetermined) of the photosensitive composition in Yamaoka according to a desired (or predetermined) run length of the printing plate. Also, it is the Examiner's position that present means and present steps of claims 17 and 18 would also have been obvious to one of ordinary skill in the art at the time the invention was made because it has been held that broadly providing a mechanical or automatic means to replace a manual activity which has accomplished the same result involves only routine skill in the art. In re Venner, 120 USPQ 193. Therefore, Yamaoka in view of Sulzberg and Sorresso and further in view of Mattor would render obvious present inventions of claims 17-19.

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13. Claims 37-41, 44, 45, 47, 50, 57-59, and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaoka et al (5,756,258) in view of Bi et al (5,599,650).

Yamaoka teaches a photopolymerizable composition having a high sensitivity to visible and *near infrared light* at a wavelength of 600 nm or more (col.1, lines 17-21). The photopolymerizable composition comprises an addition-polymerizable compound, which has at least one ethylenically unsaturated double bond (*present reactive diluent*), a radical generating agent and squarylium compound (*present infrared-absorbing dye*). See col.4, lines 50-55. Yamaoka also teaches (col.7, lines 5-15, col.12, lines 66-67, col.13, line 1) that his composition can also contain a binder polymer such as poly(meth)acrylic esters (*present acrylate resin*) as well as a colorant (a dyeing pigment). Yamaoka states (col.14, lines 18-20, lines 34-40) that his photopolymerizable composition can be used for making *printing plates* and that his composition is coated onto a base such as an aluminum sheet which surface is treated by graining and anodic oxidation processing (thus, Yamaoka teaches *present lithographic support having a hydrophilic surface*). The coated layer is then is subjected to irradiation of light, and the irradiation source includes *visible and near infrared lasers* (col.14, lines 28-33 and lines 45-47). Then the unexposed portions of the photosensitive sample are removed with a developer (such as *aqueous solutions* of an organic alkali chemicals) to provide a printing plate (col.14, lines 32-33, lines 48-49, lines 54-55).

Yamaoka does not explicitly state that his development step is done on-press. However, on-press development is well known in the art for its ability to develop an image without resorting to wet development steps or like intermediary processing steps,

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as evidenced by Bi et al, col.6, lines 43-62. Therefore, it would have been obvious to one of ordinary skill in the art to carry out an on-press development in Yamaoka in removing the unexposed portions of the photosensitive sample in order to develop the image without resorting to wet development steps and other intermediary processing steps. Therefore, Yamaoka in view of Bi would render obvious present inventions of claims 37-41, 44, 45, 47, 50, 57-59 and 63 (it is the Examiner's position that Yamaoka's composition which contains colorants would inherently be capable of being a printing ink as presently recited in claims 58 and 63. Also, since Yamaoka states that his composition is used in making printing plates, it is the Examiner's position that present steps (e) and (f) of claim 59 are impliedly taught by Yamaoka in view of Bi).

14. Claims 42, 43, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaoka et al (5,756,258) in view of Bi et al (5,599,650) as applied to claim 37 above, and further in view of Sulzberg (4,173,554).

Yamaoka in view of Bi is discussed above in Paragraph 15. As discussed above, Yamaoka teaches (col.7, lines 5-15) that his composition can contain a colorant comprising an organic or inorganic dyeing pigment. Carbon black or phthalocyanine pigments are conventionally used inorganic or organic pigments, as evidenced by Sulzberg, col.2, lines 39-43. Since Yamaoka does not give specific names for his organic or inorganic dyeing pigment, it would have been obvious to one of ordinary skill in the art to use conventionally used inorganic or organic pigment such as carbon black or phthalocyanine pigment (both of which are infrared-absorbing pigments as well) in Yamaoka as a dyeing pigment with a reasonable expectation of obtaining a

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photopolymerizable composition having a high sensitivity to visible and near infrared light. Therefore, Yamaoka in view of Bi and further in view of Sulzberg would render obvious present inventions of claims 42, 43, and 46.

15. Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaoka et al (5,756,258) in view of Bi et al (5,599,650) as applied to claim 37 above, and further in view of Mattor (3,847,614).

Yamaoka in view of Bi is discussed above in Paragraph 15. Yamaoka does not state that his photosensitive composition is coated to the base at a predetermined thickness. However, as evidenced by Mattor, col.1, lines 37-41, it is known in the art that in general, the thicker the layer of a photosensitive material, the greater the run length of a printing plate. Based on Mattor's teaching, it would have been obvious to one of ordinary skill in the art to apply a certain thickness (which is predetermined) of the photosensitive composition in Yamaoka in order to provide a satisfactory run length of the printing plate. Therefore, Yamaoka in view of Bi and further in view of Mattor would render obvious present invention of claim 51.

16. Claim 56 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaoka et al (5,756,258) in view of Bi et al (5,599,650) as applied to claim 37 above, and further in view of Sorresso (3,919,754).

Yamaoka et al in view of Bi is discussed above in Paragraph 15. Yamaoka in view of Bi do not explicitly state that the development step is done by using dampening rollers. However, dampening rollers are widely used in the art of printing trades where they are employed to carry water or other dampening solution to the printing plates, as

evidenced by Sorresso, col.1, lines 13-16. It is the Examiner's position that one of ordinary skill in the art would have found it obvious to carry out the on-press development (as taught by Yamaoka in view of Bi) and apply the developer (such as *aqueous solutions* of an organic alkali chemicals) in Yamaoka by using dampening rollers, which are widely used in the art of printing trades. Therefore, Yamaoka in view of Bi and further in view of Sorresso would render obvious present invention of claim 56.

17. Claim 65 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaoka et al (5,756,258) in view of Bi et al (5,599,650) as applied to claim 59 above, and further in view of Tanikawa et al (5,674,664).

Yamaoka et al in view of Bi is discussed above in Paragraph 15. Yamaoka in view of Bi do not explicitly state that the image is removed from Yamaoka's base after a print run has finished. However, it is well known in the art, as evidenced by Tanikawa, col.3, lines 59-65, to remove images formed on a used image support so as to regenerate an image support from the used image-bearing support for further use such as printing. Therefore, it would have been obvious to one of ordinary skill in the art to remove the images formed on Yamaoka's used image-bearing base in order to regenerate Yamaoka's image-bearing base for further use. Therefore, Yamaoka in view of Bi and further in view of Tanikawa would render obvious present invention of claim 65.

Response to Arguments

18. Applicants argue that there is no motivation to combine Yamaoka et al'258 and Bi et al'650 in order to arrive at present on-press development process because

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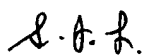
Yamaoka uses near infrared radiation for exposure step whereas Bi uses UV radiation.

The Examiner disagrees. Bi et al is being cited by the Examiner to show that it is known in the art to carry out on-press development for convenience and for saving time. It is the Examiner's position that one skilled in the art would want to carry out on-press development for convenience reason and also for saving time, regardless of the type of the radiation used for the exposure step. For this reason, present rejections still stand.

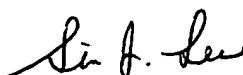
19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sin J. Lee whose telephone number is 571-272-1333. The examiner can normally be reached on Monday-Friday from 9:00 am EST to 5:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly, can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



S. Lee
September 18, 2006


SIN LEE
PRIMARY EXAMINER